

# **ABSTRACT**

A mechanical part useful in various fields of application including plastic and metal processing is produced using a computer-aided design process including a preliminary break-down of the body of the part into elementary strata, followed by manufacture of the elementary strata, and reconstruction of the part. During break-down of the part, at least one fluid transport circuit, which is designed and modeled beforehand, is broken down into elementary chambers (20) in accordance with the break-down of the part. The elementary chambers are produced in the elementary strata (7<sub>i</sub>) forming the part during manufacture of the strata, and the fluid transport circuit is reconstructed during superposition and assembly of the strata.